



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,617	02/16/2006	Wolfgang Peter	60291.000045	9357

21967 7590 11/28/2011  
HUNTON & WILLIAMS LLP  
INTELLECTUAL PROPERTY DEPARTMENT  
2200 Pennsylvania Avenue, N.W.  
WASHINGTON, DC 20037

EXAMINER

KIRSCH, ANDREW THOMAS

ART UNIT

PAPER NUMBER

3781

MAIL DATE

DELIVERY MODE

11/28/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/568,617

**Applicant(s)**

PETER ET AL.

**Examiner**

ANDREW T. KIRSCH

**Art Unit**

3781

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 5) ☒ Claim(s) 2-8, 12-14, 27-34, 36 and 37 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 2-8, 12-14, 27-34, 36 and 37 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 16 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-886)  
Paper No(s) Mail Date 9/16/2011
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s) Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

1. The amendment filed 9/16/2011 has been entered.

***Claim Rejections - 35 USC § 112***

2. The rejections to claims 3-7 and 29-32 under 35 USC 112 have been removed.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 2, 3, 5, 8, 12, 14, 27-29, 31, 34, and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. PG Pub No. 2002/0050493 (Ball et al. hereinafter).

5. In re claim 2, with reference to Figs. 2A, 4A, 12 and 13 below, Ball et al. discloses: A lid ring (16) for seaming to a body and for receiving a closure layer (28) affixed with an edge portion thereof by sealing (46) thereby bridging an inner space of the lid ring, to close the body in a seam-connected position (page 9, paragraph [0095]), wherein (i) the lid ring has a flat web (30) that is surrounding and continuous and radially outwardly merges into an edge rim (see Fig. 12) of the lid ring, a continuous surrounding groove (see Fig. 12) extending between the edge rim and the flat web; (ii) the flat web extends upwardly directly from a curved bottom portion (see Fig. 12 below) of the continuous surrounding groove and the flat web is inclined (see Fig. 12) from a horizontal plane at an inclination angle differing from zero (page 7, paragraph 76) and is

provided with an inner curling (36) on its radially inner end so that the closure layer sealed to the flat web and subjected to a pressure force acting vertically to a plane of extension of the closure layer (as in peeling) introduces a substantial force component into a sealing zone, so that the force component extends in an extension direction of the sealing zone; and (iii) the inner curling (36) is configured to deflect the closure layer so that an edge strip of the closure layer is formed (see Fig. 12) that extends at the inclination angle with respect to a plane of the closure layer in the inner space of the lid ring (note that the angle of the closure layer in the inner space is effectively zero degrees, and that the area denoted "sealing strip" extends in a direction at an angle differing from zero).

6. Note that in at least the portion sectioned in Fig. 12 below, the flat web extends upwardly directly from a curved bottom portion of the continuous surrounding groove.

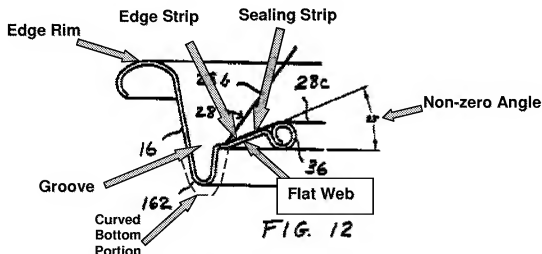


Fig. 12 of U.S. PG Pub No. 2002/0050493 (Ball et al. hereinafter)

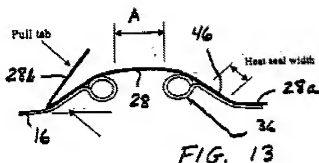
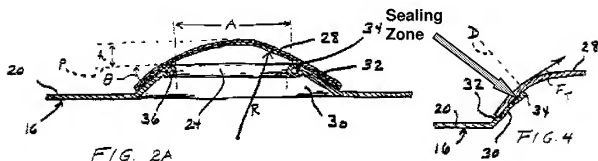


Fig. 13 of U.S. PG Pub No. 2002/0050493 (Ball et al. hereinafter)



Figs. 2A and 4 of U.S. PG Pub No. 2002/0050493 (Ball et al. hereinafter)

7. In re claim 3, with reference to Fig. 12 above, Ball et al. discloses the claimed invention including wherein the angle differing from zero is between  $10^{\circ}$  and  $90^{\circ}$  (see Fig. 12: " $23^{\circ}$ ").
8. In re claim 5, with reference to Fig. 12 above, Ball et al. discloses the claimed invention including wherein the angle is between  $25^{\circ}$  and  $35^{\circ}$  (page 7, paragraph 76).
9. In re claim 8, with reference to Figs. 2A, 4 and 13 above, Ball et al. discloses the claimed invention including wherein said receiving and sealing of the closure layer (28) is a sealing of an edge portion of the closure layer in a sealing zone (46) the flat web (30) the sealing zone extending circumferentially (paragraph 0074, see Fig. 15).

10. In re claim 12, with reference to Fig. 13 above, Ball et al. discloses the claimed invention including wherein the sealing zone as a strip extending circumferentially (46) has a substantial width of extension on the flat web (30), the width being more than half a width of the flat web (see Fig. 13 above).

11. In re claim 14, with reference to Fig. 12 above, Ball et al. discloses the claimed invention including wherein the continuous surrounding groove (see Fig. 12) is wedge-shaped with respect to the curved bottom portion and is formed between a chuck wall extending towards the surrounding lid rim (2) and the flat web (30) that extends from the curved bottom portion (as in re claim 2 above).

12. In re claim 27, with reference to the Figs. above, Ball et al. discloses: A combination of a lid ring for seaming to a body and a closure layer sealed by a surrounding edge portion to the lid ring and bridging an inner space of the lid ring, to close the body in a seam-connected position (as in re claim 2 above), wherein (i) the lid ring has a flat web (30) and the flat web is continuous and surrounding and radially outwardly merges into an edge rim of the lid ring, and a continuous surrounding groove extends between the edge rim and the flat web (as in re claim 2 above) and the flat web extends directly upward from a curved bottom portion of the continuous surrounding groove (as in re claim 2 above); (ii) onto the flat web the surrounding edge portion of the closure layer (28) is affixed by sealing along a sealing strip (see Fig. 12 above) extending circumferentially and having a substantial width on the flat web, this width being more than half of a width of the flat web (see Fig. 13 above), the flat web extending at an angle differing from zero with respect to a plane of the closure layer

affixed by said sealing (see Fig. 12); and (iii) the closure layer being a metal foil (paragraph 73) and extending over an inner curling (36) so that the metal foil is deflected forming an edge strip (see "edge strip" Fig. 12) that extends at the angle differing from zero with respect to a plane of the metal foil (note that the angle of the closure layer in the inner space is effectively zero degrees, and that the area denoted "edge strip" extends in a direction at an angle differing from zero).

13. In re claim 28, with reference to Fig. 12 above, Ball et al. discloses the claimed invention including wherein the flat web (30) comprises radially inwards an inner curling (36) located at an end of the flat web opposite the continuous surrounding groove.

14. In re claim 29, with reference to Fig. 12 above, Ball et al. discloses the claimed invention including wherein the angle differing from zero of the flat web is between 10° and 90° (see Fig. 12: "23°").

15. In re claim 31, with reference to Fig. 12 above, Ball et al. discloses the claimed invention including wherein the angle differing from zero of the flat web is between 25° and 35° (page 7, paragraph 76).

16. In re claim 34, with reference to Figs. 2A, 4 and 13 above, Ball et al. discloses the claimed invention including wherein said receiving of the metal foil as the closure layer (28) is a sealing (46) of an edge portion thereof to a circumferential sealing strip on the flat web (30) (paragraph 0074, see Fig. 15).

17. In re claim 37, with reference to Fig. 12 above, Ball et al. discloses the claimed invention including wherein the continuous surrounding groove (see Fig. 12) is of a wedge-shape having a rounded bottom as the curved bottom portion and is formed

between a chuck wall extending towards the edge rim (2) and the flat web (30), the flat web extending from the rounded bottom at the angle differing from zero (as in re claim 2 above).

***Claim Rejections - 35 USC § 103***

18. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.



4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
21. Claims 4, 6-7, 30, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ball et al.
22. In re claims 4 and 30, with reference to the Figures above, Ball et al. discloses the claimed invention except wherein the angle differing from zero of the flat web/inclination angle ( $\alpha_2$ ) is between 40° and 60°.
23. However, Ball et al. teaches that slope angle of the flange (flat web) should be chosen to be sufficiently large so as to be compatible with the bulging characteristic of the chosen closure member material (page 7, paragraph 85).
24. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have interpreted the teaching of Ball et al. and realized various angles based on the selection of the closure layer (28) material. This teaching alludes to the relationship between the closure layer material and angle under circumstances that would require a larger or steeper angle even though Ball et al. only discloses a range of angles from "about 12.5 degrees" to "about 30 degrees."
25. In re claims 6 and 32, with reference to the Figures above, Ball et al. discloses the claimed invention except wherein the angle differing from zero of the flat web/inclination angle is between 80° and 90°.
26. However, as described above, Ball et al. teaches a relationship between the closure layer material and the angle of the flat web (page 7, paragraph 85).
27. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have interpreted the teaching of Ball et al. and realized various

angles based on the selection of the closure layer (28) material. It would not have been unreasonable to have arrived at an angle between substantially 80 and 90 degrees based on the selection of material for the closure layer as well as the internal pressure characteristic of the desired stored contents which relates directly to the peeling and tensile forces imparted on the closure layer (page 7, paragraph 83).

28. In re claims 7 and 33, with reference to the Figures above, Ball et al. discloses the claimed invention except wherein the angle differing from zero of the flat web/inclination angle extends substantially vertically with respect to the plane of the closure layer (28) in the inner space of the ring.

29. However, as described above, Ball et al. teaches a relationship between the closure layer material and the angle of the flat web (page 7, paragraph 85).

30. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have interpreted the teaching of Ball et al. and realized various angles based on the selection of the closure layer (28) material. It would not have been unreasonable to have arrived at an angle between substantially 80 and 90 degrees (i.e.: substantially vertical) based on the selection of material for the closure layer as well as the internal pressure characteristic of the desired stored contents which relates directly to the peeling and tensile forces imparted on the closure layer (page 7, paragraph 83).

31. Claims 13 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ball et al. as applied to claims 1 and 2 above, and further in view of U.S. Patent No. 6,082,944 (Bachmann et al. hereinafter).

32. In re claims 13 and 36, with reference to the Figures above, Ball et al. discloses the claimed invention including an alignment of the flat web that projects steeply upwards.

33. Ball et al. fails to disclose wherein the inner curling (at the flat web) axially projects above an upper side/level of the lid rim.

34. However, with reference to Fig. 2 below, Bachmann et al. discloses a can end configuration with a removable closure layer (14), in which an inner curling (30) axially projects above an upper side/level of the lid rim (see Fig. 2).

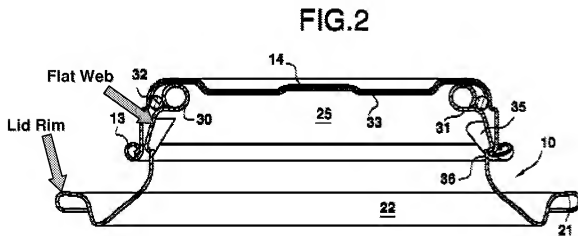


Fig. 2 of U.S. Patent No. 6,082,944 (Bachmann et al. hereinafter)

35. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the curl of Ball et al. to be elevated in relation to the upper side/level of the lid rim as taught by Bachmann et al. Such a modification would have allowed for improved mouth construction for better pouring and drinking comfort (column 2, lines 15-23).

***Response to Arguments***

36. Applicant's arguments regarding the newly amended claim limitations filed 9/16/2011 have been fully considered but they are not persuasive and have been addressed in the above rejection.

***Conclusion***

37. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW T. KIRSCH whose telephone number is (571)270-5723. The examiner can normally be reached on M-Th, 6:30am-5pm, off Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ANDREW T KIRSCH/  
Examiner, Art Unit 3781

/Anthony Stashick/  
Supervisory Patent Examiner, Art  
Unit 3781